

Application No.: 09/892,879

Attorney Docket No.: 8733.446.00-US

Supplemental Amendment Dated: November 25, 2003

Amendment to the Claims:

This listing of claims will replace all prior versions of claims in the application:

Claim 1 (Currently Amended): An in-plane switching liquid crystal display device, comprising:

first and second substrates;

a plurality of data lines on the first substrate;

a plurality of gate lines crossing the data lines on the first substrate, perpendicular to the data lines;

a plurality of pixel areas on said first substrate defined by the data and gate lines;

data electrodes and common electrodes alternately formed in each of said pixel areas, the data electrodes having a first transmittance area and the common electrodes having a second transmittance area, wherein at least one light shielding layer is formed on the first substrate under at least one of the common electrodes, wherein a number of common electrodes having no light shielding layer thereunder is equal to a number of data electrodes having no light shielding layer thereunder so that the first transmittance area equals the second transmittance area; and

a liquid crystal layer between said first and second substrates.

Claim 2 (Cancelled)

Claim ²3 (Original) The in-plane switching liquid crystal display device of claim 1, wherein the data electrodes and the common electrodes are on different layers.

Claim 4 (Cancelled)

Application No.: 09/892,879

Attorney Docket No.: 8733,446.00-US

Supplemental Amendment Dated: November 25, 2003

Claim ³/~~3~~ (Currently Amended) The in-plane switching liquid crystal display device of claim ~~[[4]]~~ 1, wherein the light shielding layer and the gate lines comprise a same material.

Claim ⁴/~~4~~ (Currently Amended) The in-plane switching liquid crystal display device of claim ~~[[4]]~~ 1, wherein the light shielding layer and the data lines comprise a same material.

Claim ⁵/~~7~~ (Currently Amended) The in-plane switching liquid crystal display device of claim 1, further comprising ~~at least one light shielding layer on the first substrate under at least one of the common electrodes and~~ at least one light shielding layer under at least one of the data electrodes ~~such so~~ so that light transmittance of the common electrodes is the same as light transmittance through the data electrodes

Claim ⁶/~~8~~ (Currently Amended) The in-plane switching liquid crystal display device of claim ~~7~~, wherein the at least one light shielding layer ~~layers~~ and the gate lines comprise a same material.

Claim ⁷/~~9~~ (Currently Amended) The in-plane switching liquid crystal display device of claim ~~7~~, wherein the at least one shielding layer ~~layers~~ and the data lines comprise a same material.

Claim 10 (Cancelled)

Claim ⁸/~~11~~ (Currently Amended) The in-plane switching liquid crystal display device of claim ~~[[4]]~~ 1, wherein the ~~at least one common electrodes include electrode includes~~ at least one outermost common electrode adjacent to at least one of said data lines; and

wherein the light shielding layer is ~~configured~~ formed under the at least one outermost common electrode ~~electrodes~~.

Application No.: 09/892,879

Attorney Docket No.: 8733.446.00-US

Supplemental Amendment Dated: November 25, 2003

Claim 12 (Cancelled)

Claim 13 (Cancelled)

Claim 14 (Cancelled)

Claim 15 (Cancelled)

Claim 16 (Cancelled)

Claim 17 (Cancelled)

Claim ¹⁸~~18~~ (Currently Amended) An in-plane switching liquid crystal display device, comprising:

first and second substrates;

a plurality of pixel areas on said first substrate;

data electrodes and common electrodes alternately formed in each of said pixel areas and patterned, wherein a light shielding layer is formed under at least one of said data electrodes, wherein a number of data electrodes having no light shielding layer thereunder is equal to a number of common electrodes having no light shielding layer thereunder so that the data electrodes and common electrodes have a same light transmitting area according to an applied voltage; and

a liquid crystal layer between said first and second substrates.

Claim 19 (Cancelled)

²⁰
Claim ~~20~~ (Original) The device of claim ⁹~~18~~, wherein said data electrodes and said common electrodes are formed on planes different from each other.

Application No.: 09/892,879

Attorney Docket No.: 8733,446.00-US

Supplemental Amendment Dated: November 25, 2003

Claim 21 (Cancelled)

¹² Claim ~~22~~ (Previously Presented) The device of claim ³ ~~18~~, further comprising a light shielding layer for shielding outermost ones of said common electrodes.

¹³ Claim ~~23~~ (Previously Presented) The device of claim ¹² ~~22~~, wherein said light shielding layer is formed under said outermost ones of said common electrodes.

Claim 24 (Cancelled)

Claim 25 (Cancelled)

Claim 26 (Cancelled)

¹¹ Claim ~~27~~ (Original) The device of claim ¹⁰ ~~20~~, further comprising an insulation film on the data electrodes.

Claim 28 (Cancelled)

¹⁴ Claim ~~29~~ (Original) The device of claim ⁹ ~~18~~, wherein said data electrodes and said common electrodes are a stripe type.

Claim 30 (Cancelled)

Claim 31 (Cancelled)

¹⁵ Claim ~~32~~ (Currently Amended) A method of manufacturing an in-plane switching liquid crystal display device comprising:

preparing first and second substrates;

Application No.: 09/892,879

Attorney Docket No.: 8733.446.00-US

Supplemental Amendment Dated: November 25, 2003

forming a plurality of gate lines and data lines on the first substrate to define a plurality of pixel areas;

forming an insulation film over a surface of the pixel areas including the gate lines;

forming light shielding layers having a predetermined width on the insulation film;

forming a plurality of data electrodes and common electrodes having an alternating pattern in each of the pixel areas, wherein at least one of the light shielding layers is formed under at least one of the data electrodes so that the plurality of data electrodes and common electrodes have and having a same light transmitting area; and

forming a liquid crystal layer between the first and second substrates.

Claim ¹⁶33 (Currently Amended) The method of claim 32, wherein said forming a plurality of data electrodes and common electrodes includes:

~~forming an insulation film over a surface of the pixel areas including the gate lines;~~

~~forming light shielding layers having a predetermined width on the insulation film;~~

~~forming the data lines on the insulation film;~~

forming a first protective film on the surface of the pixel areas including the light shielding layers;

forming a plurality of data electrodes on the first protective film corresponding to areas between the light shielding layers;

forming a second protective film on the surface of the pixel areas including the data electrodes; and

forming a plurality of common electrodes on the second protective film corresponding to areas between adjacent ones of the data electrodes.

Claim 34 (Cancelled)

Application No.: 09/892,879

Attorney Docket No.: 8733.446.00-US

Supplemental Amendment Dated: November 25, 2003

Claim 35 (Cancelled)

Claim ~~36~~¹⁶ (Previously Presented) The method of claim ~~33~~¹⁶, wherein outermost ones of the plurality of common electrodes in the pixel areas are substantially vertically aligned with corresponding light shielding layers.

Claim 37 (Cancelled)

Claim 38 (Cancelled)

Claim 39 (Cancelled)

Claim ~~40~~¹⁶ (Currently Amended) The method of claim ~~[[33]]~~¹⁵ ~~32~~, wherein said light shielding layers are formed of the same material as the data lines.

Claim 41 (Cancelled)

Claim ~~42~~¹⁹ (Currently Amended) The method of claim ~~[[38]]~~¹⁵ ~~32~~, wherein the light shielding ~~layer is~~ layers are formed of the same material as the data lines.

Claim 43 (Cancelled)

Claim 44 (Cancelled)

Claim ~~45~~²⁰ (Original) The method of claim ~~32~~¹⁵, wherein the data electrodes and the common electrodes are formed of a transparent conductive material.

Claim ~~46~~²¹ (Original) The method of claim ~~45~~, wherein the transparent conductive material is ITO.